

ABSTRACT

The present invention provides a coated cutting tool in which fracture resistance and wear resistance are simultaneously realized, tool life is improved, and surface roughness of machined workpiece is improved.

5 The coated cutting tool is provided with hard coating layer 2 on substrate 1. The substrate 1 is formed of a binder phase comprising one or more kinds of iron-group metals and a hard phase comprising one or more kinds of substances selected from the group consisting of carbides, nitrides, and oxides of the periodic table IVa-, Va-, and VIa-group elements, and solid solutions
10 thereof. In the coating layer 2, blade-edge ridge 3, a range of at least $200\text{ }\mu\text{ m}$ from the rake face side boundary 6 of the same ridge toward the rake face side, and a range of at least $50\text{ }\mu\text{ m}$ from the flank side boundary 7 of the same ridge toward the flank side are formed to be smooth surfaces which substantially have surface roughness (R_{max}) of $0.2\text{ }\mu\text{ m}$ or less (reference length: $5\text{ }\mu\text{ m}$).